Amendments to the Drawings:

The attached replacement sheets of drawings includes changes to Figs. 7, 8, 9, 10A, 10B, 11 and 12 and replace the previously filed sheets including those same figures.

Figs. 7, 8, 9, 10A, 10B, 11 and 12 have been labeled with the legend "Prior Art."

Various informalities noted by the Examiner have been corrected in Fig. 9 as follows:

- the second entry in column Q1 has been changed to "G"
- the third entry in column Q0 has been changed to "G"

Attachments following last page of this Amendment:

  Replacement Sheets (4 pages)
  Annotated Sheet (1 sheet including Fig. 9)

FIG. 8

TRUTH TABLE OF SHIFT CIRCUIT A
(WHERE DATA INPUT IS 16 BITS, AND THERE ARE FOUR SHIFT CIRCUITS)

INPUT							OUTPUT			
D0	D1	D2	. . .	D15	SEL	CLK	Q0	Q1	Q2	Q3
A	B	C	. . .	P	0	↑	A	B	C	D
A	B	C	. . .	P	1	↑	B	C	D	E
A	B	C	. . .	P	2	↑	C	D	E	F
A	B	C	. . .	P	. . .	↑	. . .	. . .	. . .	. . .
A	B	C	. . .	P	15	↑	P	A (+1)	B (+1)	C (+1)

FIG. 9

TRUTH TABLE OF SHIFT CIRCUIT B
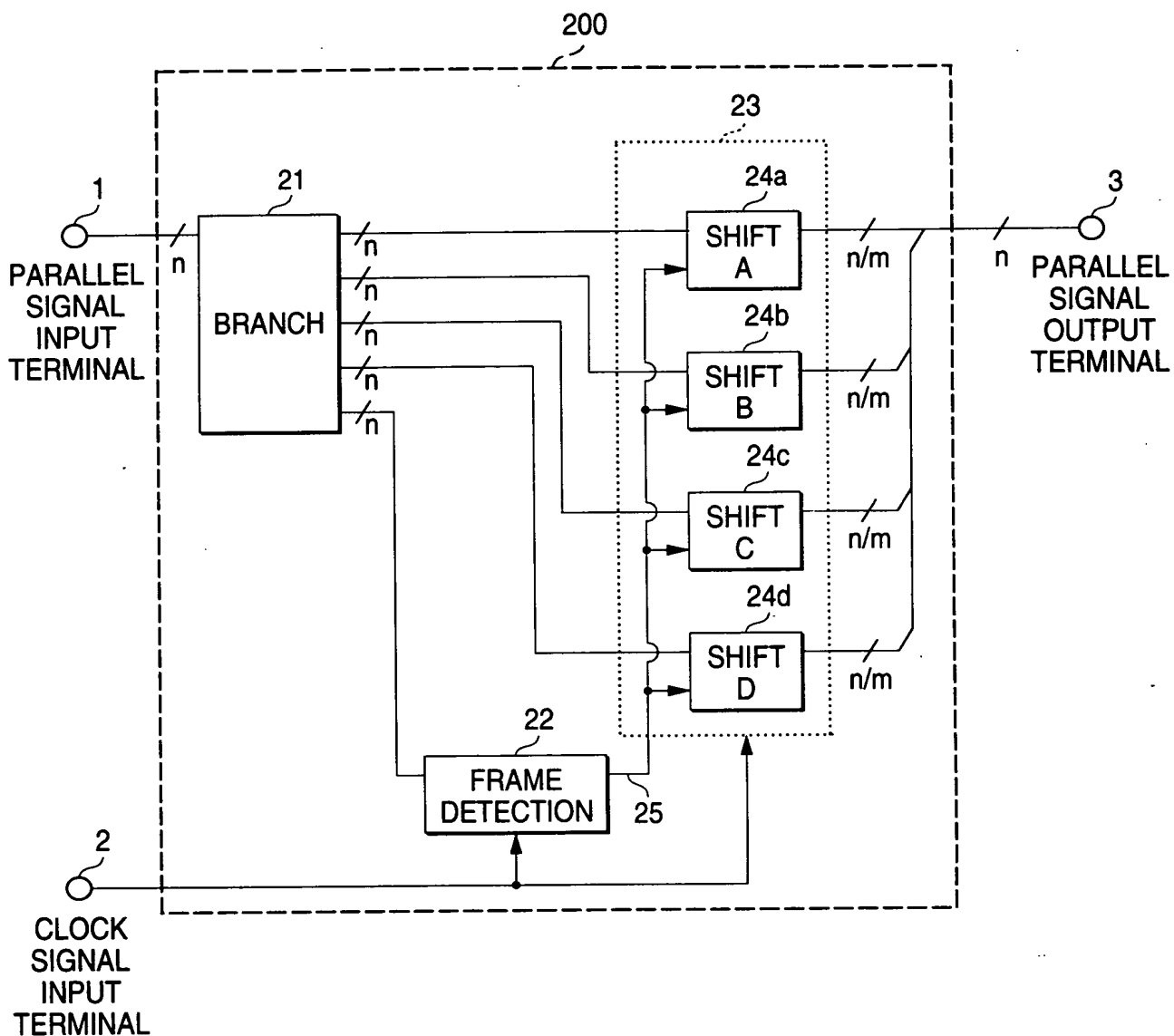### (WHERE DATA INPUT IS 16 BITS, AND THERE ARE FOUR SHIFT CIRCUITS)

INPUT							OUTPUT			
D0	D1	D2	. . .	D15	SEL	CLK	Q0	Q1	Q2	Q3
A	B	C	. . .	P	0	↑	E	F	G	H
A	B	C	. . .	P	1	↑	F	̶X̶ G	H	I
A	B	C	. . .	P	2	↑	G ̶X̶	H	I	J
A	B	C	. . .	P	. . .	↑	. . .	. . .	. . .	. . .
A	B	C	. . .	P	15	↑	D (+1)	E (+1)	F (+1)	G (+1)

MARKED-UP COPY

Prior Art

FIG. 7

Prior Art

FIG. 8

TRUTH TABLE OF SHIFT CIRCUIT A
(WHERE DATA INPUT IS 16 BITS, AND THERE ARE FOUR SHIFT CIRCUITS)

INPUT							OUTPUT			
D0	D1	D2	. . .	D15	SEL	CLK	Q0	Q1	Q2	Q3
A	B	C	. . .	P	0	↑	A	B	C	D
A	B	C	. . .	P	1	↑	B	C	D	E
A	B	C	. . .	P	2	↑	C	D	E	F
A	B	C	. . .	P	. . .	↑	. . .	. . .	. . .	. . .
A	B	C	. . .	P	15	↑	P	A (+1)	B (+1)	C (+1)

Prior Art

FIG. 9

TRUTH TABLE OF SHIFT CIRCUIT B
(WHERE DATA INPUT IS 16 BITS, AND THERE ARE FOUR SHIFT CIRCUITS)

INPUT							OUTPUT			
D0	D1	D2	. . .	D15	SEL	CLK	Q0	Q1	Q2	Q3
A	B	C	. . .	P	0	↑	E	F	G	H
A	B	C	. . .	P	1	↑	F	G	H	I
A	B	C	. . .	P	2	↑	G	H	I	J
A	B	C	. . .	P	. . .	↑	. . .	. . .	. . .	. . .
A	B	C	. . .	P	15	↑	D (+1)	E (+1)	F (+1)	G (+1)

Prior Art

FIG. 10A

Prior Art

FIG. 10B

DATA INPUT

DATA OUTPUT

BIT0	x	j (-1)	x
BIT1	x	k (-1)	x
BIT2	x	l (-1)	x
BIT3	x	m (-1)	x
BIT4	x	n (-1)	x
BIT5	x	o (-1)	x
BIT6	x	p (-1)	x
BIT7	x	a	x
BIT8	x	b	x
		⋮	
BIT14	x	h	x
BIT15	x	i	x

FRAME
POSITION SIGNAL

x	a	x	SHIFT A OUTPUT
x	b	x	
x	c	x	
x	d	x	
x	e	x	SHIFT B OUTPUT
x	f	x	
x	g	x	
x	h	x	
x	i	x	
⋮			
x	o	x	
x	p	x	

Prior Art
FIG. 11
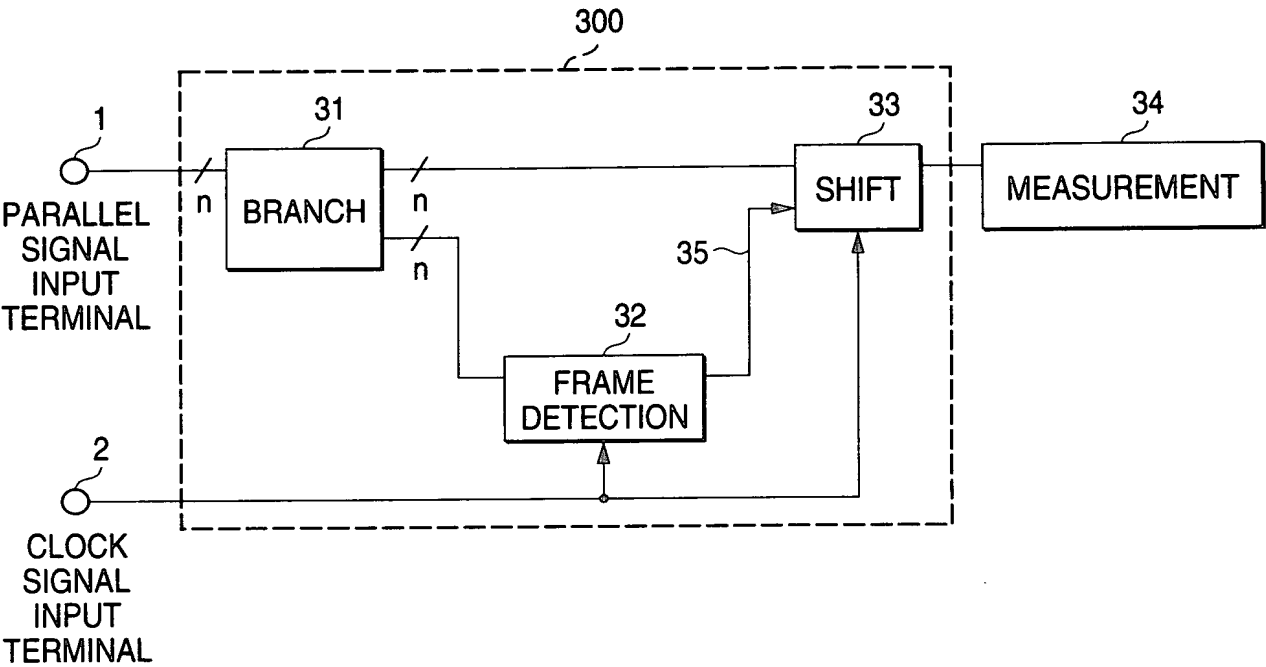
Prior Art
FIG. 12

TRUTH TABLE OF SHIFT CIRCUIT (WHERE DATA INPUT IS 16 BITS)

INPUT							OUTPUT				
D0	D1	D2	· · ·	D15	SEL	CLK	Q0	Q1	Q2	· · ·	Q3
A	B	C	· · ·	P	0	↑	A	B	C	· · ·	P
A	B	C	· · ·	P	1	↑	B	C	D	· · ·	A (+1)
A	B	C	· · ·	P	2	↑	C	D	E	· · ·	B (+1)
A	B	C	· · ·	P	· · ·	↑	· · ·	· · ·	· · ·	· · ·	· · ·
A	B	C	· · ·	P	15	↑	P	A (+1)	B (+1)	· · ·	O (+1)